REMARKS/ARGUMENTS

This case has been carefully reviewed and analyzed in view of the Official Action dated 2 November 2004. Responsive to the objections and rejections made by the Examiner in the Official Action, Claims 6-18 have been amended and are now clearer in their respective recitations. Additionally, Claims 1-5 have been cancelled and Claims 19-20 have been appended for prosecution. Claims 6-20 will be pending in this Application upon entry of the Amendment filed herewith.

In the Official Action, the Examiner objected to the Specification as failing to provide proper antecedent basis for the subject matter of Claims 1-5. Accordingly, Claims 1-5 have been cancelled by this Amendment, though done so without prejudice or disclaimer of the subject matter recited therein.

In the Official Action, the Examiner rejected Claims 1, 5-6, 8, 11-12, 13, 15 and 18 under 35 U.S.C. § 102(b) as being anticipated by Chien, et al. (U.S. Patent 5,621,467; hereinafter Chien). In setting forth this rejection, the Examiner cited Chien's forward error code (FEC) decoder 12 as fulfilling the claimed means for retrieving FEC codes from the video bitstream in response to a detection of video data corruption. The Examiner further rejected Claims 5-6 and 13 under 35 U.S.C. § 102(e) as being anticipated by Canfield, et al. (U.S. Patent 6,310,922; hereinafter Canfield). The Examiner equated FEC decoder 12 of Canfield with the claimed means for determining the presence of corruption in a portion of the video

data retrieved. The Examiner further cited inverse transport processor 13 of Canfield as fulfilling the claimed means for retrieving FEC codes from the video bitstream in response to a detection of video data corruption.

The Examiner rejected Claims 2, 4, 7, 10, 14 and 17 under 35 U.S.C. § 103(a) as being unpatentable over Chien as applied to Claims 1, 6 and 13, and further in view of Kikuchi, et al. (U.S. Patent 6,415,389; hereinafter Kikuchi). The Examiner admitted that while Chien shows the use of FEC codes and implements MPEG decoding therewith, Chien does not particularly teach the FEC codes being Bose-Chaudhuri-Hocquenghem (BCH) codes. The Examiner further admitted that Chien fails to show video data being retrieved from a packet for video object playing (VOP) with corresponding FEC code retrieval. The Examiner relied on Kikuchi for showing Applicant's claimed elements and method steps, as previously submitted, not taught by Chien and concluded that, taking the teachings of Chien and Kikuchi as a whole, it would have been obvious to one of ordinary skill in the art to incorporate the BCH codes for the VOP of Kikuchi into the FEC decoder of Chien in that "[d]oing so would provide the decoder which can decrease the number of bits of a code string, to which a header information representative of the kind of error detection/correction coding must be added and which is transmitted and/or stored, to improve the quality of information".

The Examiner further rejected Claims 3-9 and 16 under 35 U.S.C. § 103(a) as being unpatentable over Chien as applied to Claims 1, 6 and 13 and further in view of Fujii, et al. (U.S. Patent 6,807,191; hereinafter Fujii). The Examiner noted that while Chien teaches a buffer for storing video data, the reference does not particularly teach the buffer as being a ring buffer. The Examiner then relied on Fujii to show a ring buffer applied to storing video data and concluded that it would have been obvious to one of ordinary skill in the art to incorporate a ring buffer of Fujii into the decoder of Chien to easily read and write video data for decoding.

Applicant's decoding method retrieves video data from a video bitstream and retrieves an FEC code from the video bitstream only when it has been determined that a portion of the video data is corrupt. Applicants' inventive method may thus be used to provide compatibility between a receiving station's decoding equipment and the video data stream. As was described in Applicants' Specification, data encoded with certain FEC codes may not be compatible with present and future video data encoding standards. The subject invention, used in conjunction with certain FEC coding schemes, such as systematic FEC codes as described in the Specification, applies an FEC code when one is available and/or when data is determined to be corrupted.

The full combinations of these and other features now more clearly recited by Applicants' pending Claims are nowhere disclosed by the cited references. As

described in Column 3 of Chien, the FEC decoder 12 examines the transmitted signal and corrects errors incurred in the transmitted channel according to its error correction capability. Thus, Chien does not disclose a step for "evaluating the video data to determine the presence of a corrupt portion thereof" and "retrieving at least one of the FEC codes from the video bitstream responsive to a positive determination of a corrupt portion of the video data as determined in the video data evaluating step" as recited in amended Claim 6 of the subject Patent Application. In contradistinction with the invention of the subject Patent Application, Chien indiscriminately applies FEC decoding to the baseband transmitted signal and corrects errors incurred in the transmission channel. Nowhere is it disclosed by Chien to correct or decode an applicable portion of the video data only if the video data is corrupted.

The same restrictive system configurations of Chien are also true of Canfield, which provides a baseband digital to forward error corrections circuit 12 thereof. Contrary to the Examiner's assertions that FEC decoder 12 of Canfield provides means for determining if there is corruption in a portion of the video data and that inverse transport processor 13 of Canfield provides means for retrieving FEC codes from the video bitstream in response to detection of corruption, column 2 of Canfield teaches that the received signal is error-corrected prior to being applied to inverse transport processor 13 (lines 55-57). Thus, Canfield does not disclose or suggest "evaluating video data to determine the presence of a corrupt

portion thereof" and "retrieving at least one of the FEC codes from the video bitstream responsive to a positive determination of a corrupt portion of the video data" as recited by newly amended Claim 6 of the subject Patent Application.

Neither Chien nor Canfield disclose the steps of "determining the presence in the video bitstream of FEC codes corresponding to a portion of the retrieved video data", "retrieving at least one FEC code corresponding to the portion of retrieved video data from the video bitstream upon a positive determination of the presence thereof" and "decoding the portion of the video data in accordance with the corresponding at least one FEC code" as now recited by amended Claim 13. As previously stated, both Chien and Canfield indiscriminately apply forward error correction on the incoming data and cannot therefore apply a designated FEC code to a corresponding portion of the video data as implemented by embodiments of the subject invention, as now claimed. Both Chien and Canfield disclose a legacy practice of the art, i.e., applying a forward error correction code to the incoming data regardless of whether errors are present in the data.

Further illustrating the restrictions of their respective systems and methods is that neither Chien nor Canfield may be used in implementations where the data stream is made up of video data where less than every data portion is supplemented with a corresponding FEC code. It is believed that the invention of the subject Patent Application is unique and non-obvious in that the method thereof includes the steps of "evaluating the video data to determine the presence

of a corrupt portion thereof" and "retrieving at least one of the FEC codes from the video bitstream responsive to a positive determination of a corrupt portion of the video data" as recited by independent Claim 6 and includes the method steps of "determining the presence in the video stream of FEC codes corresponding to a portion of the retrieved video data", "retrieving at least one FEC code corresponding to the portion of retrieved video data from the video bitstream upon a positive determination of the presence thereof" and "decoding the portion of the video data in accordance with the corresponding at least one FEC code", as recited by newly-amended independent Claim 13.

All of the pending claims of the subject Patent Application, either by direct recitation or by inherency from a dependency on a base Claim, include limitations of, "retrieving at least one of the FEC codes from the video bitstream responsive to a positive determination of a corrupt portion of the video data", as recited by Claim 6, or "retrieving at least one FEC code corresponding to the portion of retrieved video data from the video bitstream upon a positive determination of the presence thereof ... and decoding the portion of the video data in accordance with the corresponding at least one FEC code" as recited by Claim 13. Applying Kikuchi, Fujii, or both, to either or both of Chien and Canfield, still fails to disclose the unique combination of method steps now more clearly recited by Applicants' pending Claims for the purposes and objectives disclosed by the subject Patent Application. Thus, it is respectfully submitted, that the invention of

the subject Patent Application, as now claimed, is neither anticipated nor made obvious by the references cited.

The remaining Patent cited by the Examiner but not used in the rejections has been reviewed, but is believed to be further remote from the subject Patent Application than the references used by the Examiner when patentable considerations are taken into account.

In view of the foregoing amendments and remarks, Applicants believe that the subject Patent Application is in condition for allowance and such action is respectfully requested.

Respectfully submitted,
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